

Product datasheet for **RG211052**

CTU2 (NM_001012759) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	CTU2
Synonyms:	C16orf84; MFRG; NCS2; UPF0432
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



ORF Nucleotide Sequence: >RG211052 representing NM_001012759
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGTGTGAGGTGGGCGAGGACTACGGGGAGCCGGCGCCTGAGGAGCCGCCCCGGCGCCGCGGCCAGCC
 GTGAGCAGAAGTGTGTGAAGTGAAGGAAGCGCAGCCGTTGTGGTGATACGAGCCGGAGATGCCTTCTG
 CAGGGACTGTTTCAAGGCCCTTACGTCCACAAGTTCAGAGCCATGCTGGGCAAGAACCGGCTCATCTTT
 CCAGGCGAGAAGGTGCTCTTGGCGTGGTCTGGGGGGCCTTCGTCCAGCTCCATGGTCTGGCAGGTTCTTG
 AGGGCCTGAGCCAAGATTCTGCCAAAAGACTGCGCTTTGTGGCAGGAGTCATCTTTGTTGACGAGGGAGC
 AGCCTGTGGCCAGAGCCTAGAGGAGAGATCAAAGACCCTGGCCGAAGTGAAGCCATTCTGCAAGCAACT
 GGGTTCCTATGGCATGTGGTGGCCTTAGAGGAGGTCTTCAGCCTGCCACCGTCGGTGTCTTGGTGTCTG
 CCCAGGAGCTGGTGGGATCCGAGGGGGCCTACAAGGCGGCCGTGGACAGCTTCTCCAGCAGCAGCATGT
 GCTGGGGGCGGGGGTGGTCTGGCCCGACTCAAGGGGAGGAACAGCCACCCAGCCCCCGCTGGACCCC
 CAGAACCTGGCAAGACCGCCTGCCCTGCCAGACTGAGGCTCTTCCCAACTGTTCTGCTCAGTGAGGA
 CACTGACTGCCAAGGAGGAGCTTCTGCAGACCCTGCGGACCCACCTGATCCTCCACATGGCCCGAGCCCA
 CGGCTACTCCAAGGTATGACTGGGGACAGCTGCACACGCTTGGCTATCAAGCTCATGACCAACCTGGCG
 CTGGGTCGAGGGGCTTCTGGCCTGGGATACGGGCTTCTCGGATGAGCGGCACGGGACGTGGTGGTGG
 TGGCGCCCATGCGGGACCACACCTGAAGGAGGTGCTTTCTACAACCGCTGTTCTCCGTTCTTCTGT
 CTTACACCAAGCCGTCGACACCAAGGCCCTGAAAAGGCCAGCATCCACCGGCTGATGGAGGCTTCATC
 CTCAGGCTGCAGACCCAGTCCCTCCACTGTCAGCACTGTGTACAGGACAAGTGAAGAGTGGTGAAGG
 GCCCCCGGATGGCCCTGCTGCTGGCGACTCCGGCCCCGCTGCCCTCTGCTGTGTGCCCTGGACGT
 CGACGCGCTGACAGTGCCACGGCTTTTGGGGCTCAGACCTCCTCGCTCTCTCCAGATGACGTACCC
 ATCCCCCTGACTGAGACCCGGACACCCCGGGGCCCTGCTGTTCTCCAGGGGTGGGCTGGGCCACGCGT
 GCGGCCAGGGGGCTGCAGGAGGGAGGACCCCAAGCCTGCATTGAGGAGCAGCTGTGCTACAGCTGCCG
 CGTGAACATGAAGGACTTGCCCTACTGGACCCCTGCCCGCTACATCCTGGCTGAGGCCAGCTCCGC
 ACACAGAGGGCTGGGGCTTGACAGGATCCGGGACTGTCTGATTGAGGACAGTGACGACGAGGCGGGCC
 AGAGC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTAA

Protein Sequence: >RG211052 representing NM_001012759
 Red=Cloning site Green=Tags(s)

MCQVGEDYGEPAPEEPPAPRPSREQKCVKCKEAQPVVVIRAGDAFCRDCFKAFYVHKFRAMLGKNRLIF
 PGEKVLLAWSGGPSSSSMVWQVLEGLSQDSAKRLRFVAGVIFVDEGAACQSLSEERSKTLAEVKPILQAT
 GFPWHVVALEEVFSLPPSVLWCSAQELVGSEGAYKAAVDSFLQQQHVLAGGGPGPTQGEEPPQPLDP
 QNLARPPAPAQTEALSQLFCSVRTLTAKEELLQTLRTHLILHMARAHGYSKVMTGDSCTRLAIKLMTNLA
 LGRGAFLAWDTGFSDERHGDVVVRPMDHTLKEVAFYNRLFVSPSVFTPAVDTKAPEKASIHRLMEAFI
 LRLQTQFPSTVSTVYRTSEKLVKGPRDGPAAAGDSGPRCLLCMCALDVDAADSATAFGAQTSSRLSQMQSP
 IPLTETRTPPGPCSPGVGWAQRGQACRRREDPQACIEEQLCYSCRNVNMDLPSLDPLPPYILAEALR
 TQRAWGLQEIRDCLIEDSDDEAGQS

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001012759

ORF Size: 1545 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_001012759.1](#), [NP_001012777.1](#)

RefSeq Size: 1740 bp

RefSeq ORF: 1548 bp

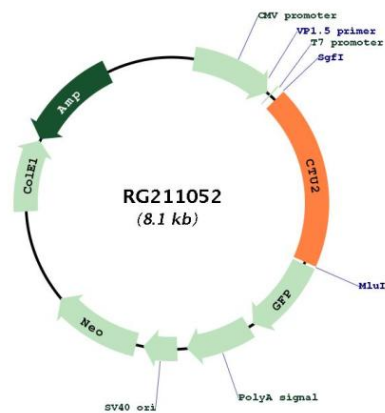
Locus ID: 348180

UniProt ID: [Q2VPK5](#)

Cytogenetics: 16q24.3

Gene Summary: This gene encodes a protein which is involved in the post-transcriptional modification of transfer RNAs (tRNAs). The encoded protein plays a role in thiolation of uridine residue present at the wobble position in a subset of tRNAs, resulting in enhanced codon reading accuracy. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Jan 2016]

Product images:



Circular map for RG211052